

AMENDMENT

In the Claims

Please cancel claims 145-147 without prejudice, and amend claims 102, 142-144, 148-157, and 159-166 to read as shown in the following claim copy where amendments are clearly marked:

102. (Currently amended) An encapsulated electrophoretic element comprising an electrophoretic ink, the electrophoretic ink comprising a plurality of non-spherical capsules dispersed in a binder, at least one of the capsules being enclosed by a deformable membrane deformed into a non-spherical shape, wherein the plurality of capsules form substantially a single layer when the ink is disposed on a substrate.

103. (Previously added) The element of claim 102 wherein the capsules are substantially uniform in size.

104. (Previously added) The element of claim 102 wherein the capsules are substantially planar on at least one side proximate the substrate.

105. (Previously added) The element of claim 102 wherein the capsules are closely-packed.

106. (Previously added) The element of claim 102 wherein the binder comprises a binder solid and wherein a ratio of the mass of the binder solid to the mass of the capsules is between about 1:2 and about 1:20.

107. (Previously added) The element of claim 102 wherein at least a portion of the element has an optically active fraction of at least 70%.

108. (Previously added) The element of claim 102 wherein the single layer of capsules forms a film.

109. (Previously added) The element of claim 108 further comprising a layer of material substantially filling any interstices formed within the film.

110. (Previously added) The element of claim 109 wherein the layer of material is substantially planar on a side opposite the film.

111. (Previously added) The element of claim 109 wherein the capsules, the binder, and the layer of material comprise a stratum having a substantially uniform thickness.

112. (Previously added) The element of claim 111 wherein the stratum has a thickness of about 10 μm to about 500 μm .

113. (Previously added) The element of claim 109 wherein the layer of material comprises the binder.

114. (Previously added) The element of claim 109 wherein the layer of material comprises an insulator.

115. (Previously added) The element of claim 109 wherein the layer of material is tacky during at least one of prior to, during, and after substantially filling the interstices within the film.

116. (Previously added) The element of claim 109 wherein the layer of material is in a liquid state during at least one of prior to, during, and after substantially filling the interstices within the film.

117. (Previously added) The element of claim 109 wherein the capsules, the binder, and the layer of material comprise a stratum that is substantially free from voids.

118. (Previously added) The element of claim 109 wherein the layer of material has a thickness of less than or equal to about 50 μm .

119. (Previously added) The element of claim 109 wherein the layer of material comprises a conductor.

120. (Previously added) The element of claim 109 wherein the layer of material comprises a semiconductor.

121. (Previously added) The element of claim 109 wherein the layer of material comprises an adhesive containing a material selected from the group consisting of carbon particles, gold

particles, aluminum particles, platinum particles, silver particles, plated polymer spheres, plated glass spheres, and indium tin oxide particles.

122. (Previously added) The element of claim 109 wherein the layer of material comprises an adhesive containing a material selected from the group consisting of polyacetylene, polyaniline, polypyrrole, polyethylene dioxythiophene, and polythiophene.

123. (Previously added) The element of claim 109 further comprising a rear substrate disposed adjacent the layer of material.

124. (Previously added) The element of claim 123 wherein the layer of material is associated with the film before a lamination procedure of the film is completed.

125. (Previously added) The element of claim 123 wherein the layer of material is associated with the rear substrate before a lamination procedure of the film is completed.

126. (Previously added) The element of claim 123 wherein the rear substrate comprises a material selected from the group consisting of a polymeric material, a glass, and a metal.

127. (Previously added) The element of claim 123 wherein the rear substrate comprises at least one electrode.

128. (Previously added) The element of claim 123 wherein the rear substrate comprises at least one transistor.

129. (Previously added) The element of claim 128 wherein the transistor comprises a silicon-based material.

130. (Previously added) The element of claim 128 wherein the transistor comprises an organic material.

131. (Previously added) The element of claim 123 wherein the rear substrate comprises at least one diode.

132. (Previously added) The element of claim 102 wherein the substrate comprises a polymeric material.

133. (Previously added) The element of claim 102 wherein the substrate comprises at least one electrode.

134. (Previously added) The element of claim 133 wherein the electrode comprises indium tin oxide.

135. (Previously added) The element of claim 102 wherein the substrate comprises a polyester film.

136. (Previously added) The element of claim 102 wherein the substrate has a thickness of about 25 μm to about 500 μm .

137. (Previously added) The element of a claim 102 wherein the membrane has a thickness from about 0.2 μm to about 10 μm .

138. (Previously added) The element of claim 102 wherein at least one of the capsules includes a suspending fluid and at least one species of electrophoretic particle.

139. (Previously added) The element of claim 102 wherein at least one of the capsules includes at least two species of electrophoretic particles, wherein an optical property of a first species of particle is different from a second species of particle.

140. (Previously added) The element of claim 102 wherein the binder comprises a curable material.

141. (Previously added) The element of claim 102 wherein the capsules are of more than one shape.

142. (Currently amended) An encapsulated electrophoretic element comprising an electrophoretic ink, the electrophoretic ink comprising a plurality of non-spherical capsules dispersed in a binder comprising a binder solid, at least one of the capsules being enclosed by a membrane, wherein the plurality of capsules form substantially a single layer when the ink is disposed on a substrate, ~~and the binder~~ and wherein a ratio of a mass of the binder solid to a mass of the capsules is between about 1:2 and about 1:20.

143. (Currently amended) An encapsulated electrophoretic element comprising an electrophoretic ink, the electrophoretic ink comprising a plurality of non-spherical capsules dispersed in a binder, at least one of the capsules being enclosed by a membrane, and at least one of the capsules comprising at least one electrophoretic particle dispersed in at least one suspending fluid, wherein the plurality of capsules form substantially a single layer when the ink is disposed on a substrate and at least a portion of the element has an optically active fraction of at least 70%.

144. (Currently amended) ~~An~~ The electrophoretic element of claim 102 wherein ~~comprising a plurality of non-spherical capsules wherein the plurality of capsules form substantially a single layer on a substrate,~~ at least one of the capsules ~~comprising~~ comprises at least one electrophoretic particle dispersed in a mixture of two or more suspending fluids.

145. (Canceled).

146. (Cancelled).

147. (Canceled).

148. (Currently amended) The element of claim ~~144~~ 143 wherein the capsules are closely-packed.

149. (Currently amended) The element of claim ~~144~~ 143 wherein the capsules are substantially uniform in size.

150. (Currently amended) The element of claim ~~144~~ 143 wherein the capsules are of more than one shape.

151. (Currently amended) The element of claim ~~144~~ 143 wherein the capsules are substantially planar on at least one side proximate the substrate.

152. (Currently amended) The element of claim ~~144~~ 143 ~~further comprising a~~ wherein the binder substantially ~~filling~~ fills any interstices formed within the single layer of capsules.

153. (Currently amended) The element of claim ~~144~~ 143, wherein the ~~element further comprises a binder comprising~~ comprises a material selected from the group consisting of resins,

evaporative liquids, water-soluble polymers, water-dispersed polymers, oil-soluble polymers, thermoset polymers, thermoplastic polymers, radiation-cured polymers, ultraviolet-cured polymers, water-reducible monomers, and water-reducible oligomers.

154. (Currently amended) The element of claim ~~153~~143, wherein the binder comprises a material selected from the group consisting of polysaccharides, polyvinyl alcohols, polyurethanes, acrylics, polyesters, polycarbonates, silicones, and epoxies.

155. (Currently amended) The element of claim ~~144~~143, wherein the at least one ~~of the~~ suspending fluids is selected from the group consisting of halogenated solvents, saturated hydrocarbons, silicone oils, low molecular weight halogen-containing polymers, epoxides, vinyl ethers, and aromatic hydrocarbons.

156. (Currently amended) The element of claim ~~155~~143, wherein the at least one ~~the~~ suspending fluids is selected from the group consisting of toluene, naphthalene, paraffinic liquids, and poly(chlorotrifluoroethylene) polymers.

157. (Currently amended) The element of claim ~~144~~143, wherein the at least one ~~of the~~ suspending fluids further comprises an additive selected from the group consisting of surface modifiers, dyes, surfactants, charge control agents, and stabilizers.

158. (Previously added) The element of claim 157, wherein the additive is selected from the group consisting of azo dyes, anthraquinone dyes, triphenylmethane dyes and sodium dodecylsulfate.

159. (Currently amended) The element of claim ~~144~~143, wherein the at least one electrophoretic particle is selected from the group consisting of neat pigments, dyed pigments, polymers, composites of pigment and polymer, scattering pigments, absorbing pigments, luminescent particles, and retroreflective particles.

160. (Currently amended) The element of claim ~~144~~143, wherein ~~said the~~ at least one electrophoretic particle is selected from the group consisting of zinc sulfide particles and titania particles.

161. (Currently amended) The element of claim 160, wherein ~~said the~~ at least one particle comprises a metal oxide-coated titania particle.

162. (Currently amended) The element of claim 144143, wherein ~~said the~~ at least one electrophoretic particle comprises a charge control agent.

163. (Currently amended) The element of claim 144143, ~~wherein said display~~ further comprising at least one transparent electrode.

164. (Currently amended) The element of claim 144143, ~~wherein said display~~ comprises further comprising a black-and-white display.

165. (Currently amended) The element of claim 144143, wherein ~~said display~~ comprises further comprising a multi-color display.

166. (Currently amended) The element of claim 144143, wherein ~~said display~~ the element is flexible.